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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,596

06/09/2006

Andreas Bode

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SIEMENS CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
170 WOOD AVENUE SOUTH  
ISELIN, NJ 08830

EXAMINER

BHAT, ADITYA S

ART UNIT

PAPER NUMBER

2863

MAIL DATE

DELIVERY MODE

12/19/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/582,596	BODE, ANDREAS	
	<b>Examiner</b>	<b>Art Unit</b>	
	ADITYA BHAT	2863	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status***

1. Claims 8-21 are currently pending in this application. Claims 8 and 21 have been currently amended by applicant. Claims 8-21 are rejected.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

3. The drawings submitted on 6/09/2006 are in compliance with 37 CFR § 1.81 and 37 CFR § 1.83 and have been accepted by the examiner.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 8-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Specifically, the process steps should (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under *35 USC § 101* and has been rejected as being directed towards non-statutory subject matter.

### ***Claim Rejections - 35 USC § 112***

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6. Claims 8-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specifically, the technical device is defined in applicant's specification as being embodied as a combustion chamber of a gas turbine for illustrating the inventive method. While one embodiment of a "technical device" is described in the claim it is not clear from applicant's specification how one of ordinary skill in the art would be enable all the other possible embodiments of a "technical device".

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Pierre (USPN 5,951,611) in view of In re Ileshin, 125 USPQ 416..

With regards to claim 8, La Pierre (USPN 5,951,611) teaches a method for monitoring a technical device, comprising:

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detecting a plurality of operational signals of the technical device; (Col. 1, lines 48-50)

determining a mean operational signal value using at least some of the operational signals;(Col. 4, Lines 30-35)

determining a normalized operational signal for at least one operational signal (Col. 4, lines 5-9) where the normalized operational signal is determined as a quotient; (Col. 4, lines 25-35) and

comparing the normalized operational signal with a reference value range of the relevant operational signal. (Col. 4, lines 53-58)

With regards to claim 9, La Pierre (USPN 5,951,611) teaches the reference value range is the range between a lowest and a highest value of the normalized operational signal. (Col. 4, lines 54-56)

With regards to claims 10 &11, La Pierre (USPN 5,951,611) teaches the lowest or/and highest value of the normalized operational signal are determined from actual measured values of the relevant operational signal. (Col. 4, lines 45-47)

With regards to claim 12 and 13, La Pierre (USPN 5,951,611) teaches the lowest or/and highest value of the normalized operational signal are determined using a statistical distribution function. (Col. 4, lines 48-52)

It should be noted that no special definition has been given to the term statistical distribution function in applicant's specification.

With regards to claim 14, La Pierre (USPN 5,951,611) teaches the reference value range is determined and the normalized operational signal is compared with the

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current reference value range while the technical device is operating. (Col. 4, Lines 53-58) The trend parameters that are being measured and compared must be taken when the engine is in operation. (Col. 3, lines 4-20)

With regards to claim 15, La Pierre (USPN 5,951,611) teaches the reference value range is determined multiple times while the technical device is operating and the normalized operational signal is compared with the current reference value range for each determination of the reference value range. (Col. 4, Lines 53-58)

With regards to claim 16, La Pierre (USPN 5,951,611) teaches the current value of the operational signal is compared with a predetermined monitoring threshold value. (Col. 4, lines 53-58)

With regards to claim 17, La Pierre (USPN 5,951,611) teaches a corresponding mean operational signal value is determined for each type of operational signals.

With regards to claim 18, La Pierre (USPN 5,951,611) teaches the technical device is a gas turbine engine. (Col. 2, line 66)

With regards to claim 19, La Pierre (USPN 5,951,611) teaches the operational signals are *selected from the group consisting of*: a temperature signal (Col. 2, line 62), a pressure signal, (Col. 2, line 63) a electrical current signal, and an electrical voltage signal.

With regards to claim 20, La Pierre (USPN 5,951,611) teaches the operational signals are combustion chamber burner flame temperature signals. (Col. 3, lines 18-20)

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With regards to claim 21, La Pierre (USPN 5,951,611) teaches a method for monitoring a combustion chamber burner flame temperature of a gas turbine engine, comprising:

detecting an operational signal (Col. 1, lines 48-50) of the gas turbine engine that corresponds to the combustion chamber burner flame temperature of the gas turbine engine; (Col. 3, lines 18-20)

determining a mean operational signal value of the detected operational signal; (Col. 4, lines 30-35)

determining a normalized operational signal for at least one operational signal (Col. 4, lines 5-9) where the normalized operational signal is determined as a quotient; (Col. 4, lines 25-35)

comparing the normalized operational signal with a reference value range of the detected operational signal where the reference value range is determined multiple times while the gas turbine engine is operating and the normalized operational signal is compared with the current reference value range for each determination of the reference value range; (Col. 4, Lines 53-58) The trend parameters that are being measured and compared must be taken when the engine is in operation. (Col. 3, lines 4-20) and

comparing the current value of the detected operational signal with a predetermined monitoring threshold value. (Col. 4, Lines 53-56)

With regards to claims 8 and 21, La Pierre (USPN 5,951,611) does not explicitly disclose determining a normalized operational signal using at least one operational signal divided by the determined mean operational value.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to determine a normalized operational signal using at least one operational signal divided by the determined mean operational value since it has been held to be within the general skill of a worker in the art to determine a normalized operational signal using at least one operational signal divided by the determined mean operational value on the basis of suitability for the intended use as a matter of obvious design choice. In re Ileshin, 125 USPQ 416.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 8-21 have been considered but are moot in view of the new ground(s) of rejection.

It should be noted that applicant has not shown what unexpected results come from dividing the determined mean operational signal by the operational signal. As the claimed method achieves the same result as that of the prior art applicant must show why this specific process is critical to applicant's invention and what makes it patentably distinct from the prior art.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADITYA BHAT whose telephone number is (571)272-2270. The examiner can normally be reached on 9:30-5:30.



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**11.** If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**12.** Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aditya Bhat/  
Examiner, Art Unit 2863  
December 17, 2008